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By

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Abstract

This research was a descriptive study designed to examine the relationship between prenatal knowledge and economic status of primagravidas. The researcher hypothesized that when pregnant women were surveyed and the results of knowledge and actual health care practices were correlated with economic level, there would be no significant difference.

A researcher-designed questionnaire was administered to 29 primagravidas between the ages of 18 to 32. There was a total of 29 participants. The participants consisted of 23 whites and 6 blacks.

The null hypothesis was tested by correlating the score obtained on the questionnaire with economic status. The Pearson's r correlation coefficient was used to analyze the data collected. Because the obtained r value was .4622 and significant at the .05 level, the researcher rejected the null hypothesis.

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CHAPTER I

The Research Problem

In the early 1900s, pregnant women received no maternity care at all. The only contact with health care providers was to have the family physician or midwife attend during labor and delivery (Jensen, Benson, & Bobak, 1977; Ryan, Sweeney, & Solola, 1980; Reeder, Mastroianni, & Martin, 1983). The late 1900s set a trend for utilization of hospitals for delivery and for training physicians in obstetrics. At this time physicians dominated the field of maternity care, and hospitals replaced the home deliveries. This trend caused a decrease in the public's knowledge of this normal process. The public viewed the medical field with awe and therefore let the physican make all the decisions concerning pregnancy (Reeder et al., 1983).

Prior to the 1960s, the pregnant women received a limited amount of educational information concerning pregnancy and childbirth. Most of the information obtained was from relatives and close friends that had experienced childbirth. Health care consumers became

dissatisfied with this educational neglect and began to question health care providers. This consumer involvement has had a significant impact on maternity care (Reeder et al., 1983).

There is a variety of factors, including cultural, social, and technological, that have served important roles in the growth and development of maternity care. Concepts such as family-centered maternity care, participant childbirth, rooming-in, and natural childbirth have refocused attention on childbirth as a social and family process (Jensen et al., 1977; Reeder et al., 1983). Today, there has been a distinct change in attitudes of the health care provider toward maternity care. Childbirth is now viewed as a state of preparedness that is attained with cooperation of health care providers and the expectant parents (Jensen et al., 1977; Reeder et al., 1983).

The preparation for childbirth, which is based on medical and nursing supervision throughout pregnancy, is termed prenatal care. It was not until 1909 that a committee was organized to experiment with prenatal care. This committee visited pregnant women in the home. This experiment started the development of widespread prenatal care that has played an important role advance in promoting the health and well-being of

the pregnant woman and family (Ryan et al., 1980; Reeder et al., 1983).

It was not until 1968 that the United States standard certificate of live birth included two new items related to prenatal care. It included the month of onset of prenatal care and the total number of prenatal visits. Since this addition, the effect of prenatal care could be widely assessed and related to other demographic data (Ryan et al., 1980). The concept of prenatal care, today, includes health assessment, medical care, social services, nutritional care, patient and family education, and psychological support throughout the pregnancy (Ryan et al., 1980). There is a variety of national and local agencies that offer care to the maternity patient, beginning with family planning through the adjustment of the family to the newborn child (Jensen et al., 1977). Some major goals of prenatal care include increasing the knowledge level of the expectant parents, promoting the health of the mother and infant, and promoting a smooth family transition to the new infant. Prenatal care provides the foundation for normal growth and development of the infant (Reeder et al., 1983).

In the past decade, there has been a decline in maternal mortality rates. In 1974, the maternal

mortality rate was 15 per 100,000. In 1976, there were 12.3 per 100,000, and in 1978, 9.6 per 100,000. The data already obtained from 1980 indicate a decline to 7.6 per 100,000 (National Center for Health Statistics, 1982). Infant mortality rates have declined as well. In 1979, the infant mortality rate was 13 per 1,000 live births. In 1980, there were 12.6 per 1,000, and in 1981, 11.8 per 1,000 (National Center for Health Statistics, 1982).

There are many factors responsible for the decline in maternal and infant mortality rates. Overall, medical management of the pregnant woman has improved tremendously in the past 25 years. The use of blood transfusions, antibiotics, and the careful monitoring of fluid and electrolyte balance has improved maternity care. The legalization of abortion has reduced the number of maternal deaths related to abortion. New training and educational programs in maternity care have provided more qualified health care providers. The utilization of hospital facilities have contributed to the declining infant and maternal mortality rates. Another factor in the reduction of infant and maternal mortality rates is the development of maternal and child health programs in the State Departments of Public Health, especially the community

health nurses. The advancement of prenatal care has also contributed to the decline in mortality rates. Prenatal care is now viewed as an extremely important factor in promoting the health and well-being of pregnant women (Reeder et al., 1983).

Prenatal visits should begin soon after the last menstrual period. This provides opportunities to assess the course of normal pregnancy and allows monitoring of the physiologic changes that occur (Ching, Hall, & Macgillivray, 1980). There are many advantages of prenatal care. This health supervision permits early diagnosis and intervention of maternal disorders as well as identification of any fetal or maternal abnormalities (Ching et al., 1980). Prenatal visits provide an excellent opportunity to reassure the client and/or family about the pregnancy. Another advantage is the opportunity for the client to ask questions concerning pregnancy and parenting skills, and the health care provider to answer any questions the client and/or family may have (Jensen et al., 1977).

There are many factors affecting prenatal care. The young and poor members of any racial group represent a population vulnerable to maternity complications. Many of these women do not receive

adequate prenatal care (Jensen et al., 1977). There seem to be great differences in the prenatal pattern of mothers differing in social and demographic backgrounds. On the basis of race, there are consistent findings that black mothers receive less prenatal care. In 1975, twice the number of black mothers, as compared with white mothers, had no prenatal care. Black mothers also comprise a disproportionate share of the low income and poorly educated groups. Therefore, socioeconomic factors and race are important determinants of prenatal care (Ryan et al., 1980).

In a study by Roark, Nelson, and Leveno (1984), the attainment of prenatal care was correlated with low birth weight of infants. Of these births, 745 were to mothers without prenatal care, resulting in 107 low birth weight (LBW) infants. The women that received prenatal care delivered 3,098 infants with 166 LBW infants. This study concluded that one of the major consequences of receiving no prenatal care included an increased incidence of low birth weight infants (Roark et al., 1984).

There is still a significant number of the population receiving inadequate prenatal care, which may indicate a deficiency in the present system of

maternity care (Ryan et al., 1980). As of 1983, there are no available research studies that compare the prenatal knowledge level of pregnant women with socioeconomic level.

Assessment is always the first step toward the effectiveness of any intervention. Understanding the prenatal client's current level of knowledge will provide a basis for improvement of care (Narrow, 1979). The assessment of knowledge also provides an opportunity to clarify any misinformation or misconception concerning pregnancy. Health care providers can add to the knowledge base through reinterpretation, clarification, reemphasis, and reinforcement (Reeder et al., 1983). Past and present knowledge of the pregnant woman may influence the ability to comply with a plan of care (Zander, Bower, Foster, Towson, Wermuth, & Woldum, 1978).

This researcher became interested in prenatal practices of pregnant women while working in the labor and delivery area as a registered nurse. While doing admission interviews it was noted that the mothers varied tremendously in their knowledge of prenatal care given and practiced. This fact stimulated the researcher's interest in the variation

of prenatal knowledge and practice among pregnant women.

The Family Nurse Clinician (FNC), as assessor of prenatal care, is in a unique position to promote maternal and infant health, detect early deviations from normal pregnancy, and identify family and/or client needs through assessment of the present knowledge level and economic level. By comparing prenatal knowledge level with the economic level, this relationship might enable the FNC to gain a better understanding of prenatal practices and the effectiveness of prenatal teaching.

The purpose of this study was to examine the relationship between prenatal knowledge and economic status of primagravidas. The major question this research sought to answer was: Does a correlation exist between prenatal knowledge level of pregnant women and the economic level?

CHAPTER II

Theoretical Basis of Study

Orem's self-care theory of nursing was used as the theoretical framework for this study. Orem describes self-care as the activities initiated and performed when maintaining life, health, and well-being. This process is a continuous contribution to health and well-being (Orem, 1980).

Orem's philosophy evolves around the belief that man has an innate ability to care for himself. Nursing is described as "the giving of direct assistance to a person, as required, because of a person's specific inabilities in self-care, resulting from a situation of personal health" (Orem, 1980, p. 35).

If self-care is to be a therapeutic process, it must sustain life processes, promote growth and development, and prevent or control disease. Orem identifies two categories of self-care demands and responses, which are universal self-care and health deviation self-care (Riehl & Roy, 1980).

According to Orem, there are three basic designs that will provide assistance needed to the client.

The three basic designs are wholly compensatory, supportive-educative, and partly compensatory. The Family Nurse Clinician (FNC) must select a system or a combination of systems to assist the client to achieve desired results (Orem, 1980).

When providing prenatal examinations, the FNC is concerned with promoting and maintaining health; therefore, an individual's self-care status is a vital part in maintenance of health. Utilizing Orem's universal self-care, the FNC focuses on the basic human needs of the prenatal client. The FNC utilizes the supportive-educative system during the prenatal visits. In this situation, the client cannot fully perform self-care activities and, therefore, needs assistance by teaching, guiding, and supporting.

Providing adequate prenatal examinations by the FNC can maintain health by early intervention, early detection, and early identification of client and/or family needs. The FNC can operate within a client-centered system that encourages the client to be responsible for self-care. The self-care framework can determine if prenatal actions are effective and provide a basis for a comprehensive assessment. The FNC utilizes this theory to assist the prenatal client toward optimal health.

Orem's self-care theory can be utilized during prenatal visits to assist the FNC to understand prenatal practices and knowledge levels among different economic situations. This understanding can contribute to improving prenatal care. The client seeks prenatal care and the FNC utilizes the supportive-educative system to provide assistance while monitoring pregnancy.

CHAPTER III

Theoretical Hypothesis

Theoretical Null Hypothesis

When pregnant women are surveyed and the results of knowledge and actual health care practices are correlated with economic level, there will be no significant difference.

Theoretical Definitions

1. Pregnant women: women that are pregnant for the first time and are at least 18 years old and currently receiving prenatal care.

2. Surveyed: utilizing the Prenatal Health Care Questionnaire.

3. Knowledge and actual health care practices: as indicated by the results on the Prenatal Health Care Questionnaire.

4. Correlated: utilizing Pearson's r product moment correlation.

5. Economic level: determined by the monthly income as indicated by the participant on the Prenatal Knowledge Questionnaire.

6. No significant difference: at the 0.05 level of significance.

Operational Hypothesis

When women that are pregnant for the first time and are at least 18 years old and currently receiving prenatal care are surveyed using the Prenatal Health Care Questionnaire and the results of knowledge and actual health care practices are correlated using the Pearson's r to the economic level as determined by monthly income, there will be no significant difference at the 0.05 level.

CHAPTER IV

Review of the Literature

The researcher found abundant literature pertaining to prenatal care. There were no available research studies comparing the knowledge level and prenatal health care practices of pregnant women and the economic status. The review of the literature will begin with a discussion of articles related to prenatal care in general. The remainder of the chapter will discuss articles related to the assessment of a client's knowledge level.

Prenatal Care

The study by Ching, Hall, and Macgillivray (1980) was undertaken to determine the value of the first prenatal visit. A total of 1,907 women were included in the study. The obstetricians arranging prenatal care had two options. The first was hospital care where the women were seen strictly in the hospital. The second option was a combined care where the women would attend the hospital only at 34 and 40 weeks gestation. All other visits were handled

through the general practitioner. There were some important observations made during this first visit. Only 33% of the pregnant women had attended the clinic by 12 weeks gestation and only 75% attended by 18 weeks gestation. Primagravidas tended to appear earlier. Single women and those that were married during pregnancy appeared much later for prenatal care.

The midwifery staff identified 144 women with serious medical conditions such as diabetes, epilepsy, and chronic renal disease. The medical staff did not identify 23% of these serious medical conditions. Based on these findings, the researchers recommended that more emphasis needs to be placed on health education and the need to attend early prenatal classes.

Suggestions for improving antenatal care are provided by Flint (1982) who focused on trying to improve antenatal care by identifying several common problems among antenatal clinics. The problems consisted of (a) impersonality of the experience, (b) long waiting times, (c) short consultation times with the obstetricians, and (d) lack of continuity of care. These are problems currently occurring in antenatal clinics that need to be resolved. The

antenatal visits need to be something that women enjoy and look forward to attending.

Prenatal care and pregnancy outcome were compared using two samples, a health maintenance organization (HMO) and the general population (Quick, Greenlick, and Roughmann, 1981). According to the data, the HMO members received less prenatal care than the general population. Only 64.6% of HMO members began prenatal care during the first trimester while 78.7% of the general population began within the first trimester of pregnancy. The researchers suggested that an interrelationship exists between maternal risk, prenatal care, and pregnancy outcome. There was a relationship between prenatal care and low birth weight infants in the total population studied. The percent of low birth weight infants increased as the percent of prenatal care decreased.

Ryan, Sweeney, and Solola (1980) investigated prenatal care and pregnancy outcome. This retrospective study consisted of clients that delivered during a six-month period from July 1 to December 31, 1979. All the participants delivered at the same institution, during the same time period, and had similar labor and delivery experiences. The groups differed markedly in the amount of prenatal

care received. The clients with three visits or less had a 15.8% incidence of low birth weight infants (less than 2,500 grams), compared to 9.9% of the group receiving more prenatal care ($p < 0.005$). The stillbirth ratio was nearly three times higher in the group with minimal or no prenatal care.

From these statistics the adequacy of prenatal care seems to indicate a definite effect on perinatal outcome. The researchers concluded that a major deficiency in the present system of maternity care was demonstrated by the still significant percentage of the population receiving inadequate prenatal care. Groups that are at high risk in terms of past medical care, low socioeconomic level, and certain other demographic data were most likely to receive inadequate care. Improved access is needed for high risk groups. This should concentrate on teenagers, older women, multiparous patients, the economically deprived, and black women. In this way, the greatest possible impact of prenatal care on improving the outcome of pregnancy can be achieved (Ryan et al., 1980).

Another study was undertaken by Gortmaker (1979) to understand the effects of prenatal care upon the health of the newborn. Data were obtained from New

York City in 1968 and included all births and infant deaths. Low income white mothers and black mothers tended to experience an increased risk of low birth weight infants when receiving inadequate prenatal care. Prenatal care was found to exhibit little relationship to neonatal and postneonatal mortality once birth weight and other variables were controlled. If prenatal care exerts any effects on infant mortality, it is likely that these effects occur because of the relationship of prenatal care to low birth weight. There was a large number of expectant mothers receiving adequate prenatal care while a substantial number was not.

Newton (1977) discussed antenatal care in terms of the development of regular antepartal assessments. There are several pertinent components to include during the antenatal visit. These components include the physical examination, laboratory data, pelvic examination, a complete history, and patient education. Discussions about antenatal education and intrapartal education are pertinent during all visits. The goal of adequate antenatal care is to:

> . . . have the mother go into labor at term in the best general health possible and free from fears due to ignorance and

> old wives' tales. Antepartal care is but a part of obstetric care as a whole. Good care during pregnancy must be followed by proper support during labor and by sympathetic understanding in the puerperium. (Newton, 1977, p. 607)

A study was conducted by Nunnally and Aguiar (1974) to determine attitudes of clients toward receiving prenatal care. The researchers were particularly interested in the care the clients were receiving, if certain aspects of care were given, acceptance of the perinatal nurse specialist, and how many clients were actually attending the prenatal classes. This study consisted of 128 obstetric clients who completed a questionnaire. The 52-item questionnaire consisted of 8 questions related to demographic data and 38 questions related to attitudes and care the clients had received. The questionnaire was returned by 78 clients. The greatest complaint expressed on the questionnaire was not seeing the same physician for each examination. Another complaint was the long waiting times. The clients surveyed felt that the prenatal care obtained was adequate. The perinatal nurse specialist received consistently

higher scores than did physicians and other nurses. Between 51% and 73% attended prenatal classes.

Assessment of Knowledge

Reeder, Mastroianni, and Martin (1983) describe knowledge assessment of the perspective parents as one major factor to be included in antenatal care. By identifying the client's knowledge level and understanding of antenatal care, the nurse can clarify any misconceptions or misinformation about the pregnancy. Through clarification and reinterpretation, the nurse can add to the knowledge base of the clients.

Further support was given to the establishment of knowledge assessment by Narrow (1979). "Assessment is always the first step toward the effectiveness of any nursing intervention" (p. 76). The researcher concluded that the client's current level of knowledge has to be assessed in order to provide further assessments. The understanding of this knowledge level provides vital information about the client's previous experiences.

Murray and Zenter (1979) describe knowledge assessment as a vital, continuous process. This assessment is mandatory in order to establish a baseline of information. This is necessary in order

to plan and implement a teaching program appropriate to meet the individual client's needs.

Summary

In conclusion, the researcher has reviewed numerous articles related to prenatal care and the assessment of knowledge. There were no available research studies pertaining to the knowledge level about prenatal care compared with the economic status of pregnant women. Prenatal care is available, but some are choosing not to obtain this care. Ching et al. (1980) suggested that dissatisfaction of the pregnant women during prenatal visits may be one of the reasons for declining prenatal care.

CHAPTER V

Research Design and Methodology

Research Design

The research design utilized in this study was the descriptive method. Descriptive research is aimed at describing phenomena rather than explaining them (Polit & Hungler, 1983). It consists of "describing systematically the facts and characteristics of a given population or area of interest, factually and accurately" (Isaac & Michael, 1977, p. 18).

In this study the researcher collected data on women becoming mothers for the first time and their knowledge and health care practices as correlated to their economic status. Data were collected using the Prenatal Health Care Questionnaire.

Variables

The dependent variables were knowledge and health care practices as determined by the score obtained on the Prenatal Health Care Questionnaire. Controlled variables included the age of the participant, the

number of pregnancies, and the fact that the participants are currently receiving prenatal care. The intervening variables were the participant's education level, marital status, physical and mental state at the time of testing, truthfulness when answering the test, and whether the participants have received prepared childbirth classes.

Setting, Population, and Sample

The setting for this study included three Northeast Mississippi counties within a 20-mile radius of one large industrialized city. This region is primarily agricultural although the industrialized city was included. The 1980 annual income of the first county was $11,792. The second county had an annual income of $10,344 while the third county's annual income was $11,045 (Mississippi Statistical Abstract, 1982).

According to the 1980 census, the first county has a population of 57,061 with 45,227 Caucasian and 11,651 Black. The second county has a population of 20,918 with 17,618 Caucasian and 3,259 Black while the third county has a population of 21,741 with 18,701 Caucasian and 3,000 Black (Mississippi Statistical Abstract, 1982). There were 1,885 live births recorded in county number one for 1979. County number

three recorded 532 live births while county number two recorded no live births due to the lack of a physician who would deliver infants (Mississippi Statistical Abstract, 1982). Since this statistical recording, the second county has recruited a physician that delivers infants, but no data on live births were available.

Data were collected from a variety of agencies in these counties including the health departments and private physicians' offices. In 1983, county number one had 206 maternity clients who attended 1,569 prenatal and postpartal visits. County number two had 48 maternity clients who attended the health department for a total of 325 visits (W. Denton, personal communication, May 8, 1984).

The sample for this study consisted of all primagravidas who were at least 18 years old and who were receiving prenatal care during the period of data collection. All subjects that met the criteria and were willing to participate were admitted to the sample. The sample included 29 subjects.

Data Gathering Process

Initially the researcher contacted the administrators of the health departments and the private physicians to explain the study and obtain

their consent to utilize the facilities (see Appendices A and B). During this initial contact, the researcher obtained specific days that the obstetric patients would be present in each facility. The researcher planned visits to coincide with the primagravidas' office visits.

Data were collected in May and June, 1984. The purpose of the study was explained individually to each prospective subject. An Information to Participants Sheet explaining the research study was presented at this time (see Appendix C). The participants were asked to indicate their willingness to participate in the study by signing the consent form (see Appendix D).

After signing the consent form, each participant was asked to complete the Prenatal Health Care Questionnaire (see Appendix E). During the testing period, an opportunity for questions and answers was provided. There was no time limit placed on the completion of the questionnaire.

Procedure

This questionnaire consisted of 32 questions contained in four categories: demographic, economic, health care practices, knowledge and a comment area. Numbers 1 through 12 and 21 were demographic. The

economic questions were numbers 8, 9, 11, and 12. The health care practice questions were numbers 13, 17, 18, 19, 22, 27, 30, and 31. The following numbers on the questionnaire were knowledge questions: 14, 15, 16, 20, 23, 24, 25, 26, 28, and 29. Questions 13, 14, and 29 were looked at descriptively. The following questions were given 4 points each for the most favorable response and 1 point for the least favorable response: 15 through 20, 23 through 28, 30, and 31. Questions number 21 and 22 were scored together. Number 22 was scored according to the response on number 21. The maximum score that could be obtained on the questionnaire was a score of 60. The lowest score that could be obtained was 12. The closer the score was to 60, the more desirable the health care practices. The closer the score was to 12, the least desirable the health care practices.

The questionnaire was pretested for face validity and reliability with primagravidas currently receiving prenatal care not to be included in the study. The tool was assumed to have face validity and reliability within the confines of this study.

Statistical Analysis

The Pearson's r correlation was used to determine the correlation of knowledge and prenatal health care

practices and the economic status of primagravidas. Pearson's r can summarize the magnitude and direction of the relationship between the economic status and health care practices among primagravidas (Polit & Hungler, 1983). This statistical test was chosen because it correlates interval and interval data such as the economic level and knowledge level of primagravidas.

Assumptions

1. The Family Nurse Clinician (FNC) will incorporate the results of this study into practice to improve prenatal care.

2. There are variations in economic levels among primagravidas.

3. Prenatal practices need to be monitored.

4. There are variations of health care practices during pregnancy.

5. Better prenatal care leads to healthier mothers and infants.

Limitations

1. This study will be limited to the sample in Northeast Mississippi, and therefore the results are not generalizable to other geographic areas.

2. The data is not generalizable to clients with two or more pregnancies.

3. The data is not generalizable to clients less than 18 years of age.

CHAPTER VI

Analysis of Data

The purpose of this study was to examine the relationship between prenatal knowledge and economic status of primagravidas. Data were collected from primagravidas, 18 years and over, who were administered a researcher-designed Prenatal Health Care Questionnaire. A total of 29 primagravidas participated in the study.

Of the 29 subjects, the mean age was 21.31 with a range of 18 to 32 years. Twenty-three of the subjects were white and 6 were black. Seventeen of the subjects were married and 12 were single. Twenty-four of the subjects were Protestant, 2 were Catholic, and 3 had other religious preferences. The month of pregnancy for each subject ranged from 2 months to 9 months. Of these subjects, 4 were employed while 24 were not employed. Monthly income ranged from less than $100 per month to greater than $1,300 per month. Ten subjects reported less than $100 per month. Three subjects had a savings account, 5 carried insurance, 2 were on Medicare, 7 were on

Medicaid, and 12 subjects reported other means of paying for the baby. There was 58.6% of the subjects that utilized the birth control pill prior to pregnancy.

The subjects' educational backgrounds ranged from completion of the 5th grade to completion of a college degree. The mean educational level was 10.41 years. Of these subjects, 75.9% reported that this was a planned and wanted pregnancy while 24.1% reported it was not.

One score was obtained from the researcher-designed tool. The raw scores ranged from a low of 30 to a high of 52. The mean score was 41.34. These data, along with demographic data, are found in Table 1.

Hypothesis

The researcher hypothesized that when pregnant women were surveyed and the results of knowledge and actual health care practices were correlated with economic level, there would be no significant difference. To test this hypothesis, the researcher utilized the Pearson's r correlation coefficient at the .05 level of significance. The obtained r value of .4622 was significant. Table 2 presents the statistical analysis. Because there was a significant relationship the researcher rejected the hypothesis.

Table 1

Demographic and Raw Score Data for

Prenatal Health Care Questionnaire

Subject	Age	Race	MS	Rel	MP	EMP	*IN/MO	**How Pay	BCM	ED	Score
S- 1	23	W	M	Prot	5	No	4	1	IUD	7	47
S- 2	21	W	M	Oth	9	No	4	5	BCP	12	52
S- 3	19	W	M	Prot	7	No	2	5	BCP	5	44
S- 4	22	W	S	Prot	9	No	5	3	BCP	12	39
S- 5	21	W	M	Prot	5	No	4	1	BCP	12	50
S- 6	19	W	S	Prot	9	No	3	2	Cond	9	48
S- 7	20	W	M	Prot	6	Yes	5	1	BCP	8	48
S- 8	18	W	S	Prot	9	No	1	3	BCP	9	34
S- 9	25	B	S	Prot	2	Yes	3	2	None	12	32
S-10	20	W	S	Prot	8	No	1	4	None	10	40
S-11	21	W	M	Prot	6	No	8	2	Cond	12	42
S-12	20	W	M	Cath	9	No	3	5	Cond	12	48
S-13	32	W	M	Cath	6	Yes	8	2	Oth	16	52
S-14	19	W	M	Prot	8	Yes	3	5	None	12	35
S-15	28	B	S	Prot	8	No	1	4	BCP	12	41
S-16	18	W	M	Prot	6	No	3	5	None	12	44
S-17	18	W	M	Prot	9	No	4	2	BCP	9	35
S-18	18	B	S	Prot	8	No	1	4	None	11	32
S-19	26	W	M	Prot	8	No	4	5	BCP	6	46
S-20	20	W	M	Prot	9	No	2	5	BCP	12	36
S-21	19	W	M	Prot	8	No	1	5	BCP	9	44
S-22	18	B	S	Prot	5	No	1	5	Cond	12	30
S-23	23	W	M	Prot	6	No	1	5	BCP	12	38
S-24	25	W	S	Prot	7	No	2	4	IUD	8	51
S-25	21	W	M	Prot	4	No	1	5	BCP	7	34
S-26	19	B	S	Prot	4	No	3	4	BCP	14	49
S-27	25	W	S	Oth	7	No	1	4	BCP	11	45
S-28	22	W	S	Oth	8	No	2	4	BCP	7	31
S-29	19	B	M	Prot	5	No	1	5	BCP	12	32

MS = Marital Status
Rel = Religion
MP = Month of Pregnancy
Emp = Employed
IN/MO = Income/Monthly
How Pay = How to pay for the baby
BCM = Birth Control Method
Ed = Highest grade completed

*IN/MO:
1 = Less than $100
2 = $100 - $300
3 = $300 - $500
4 = $500 - $700
5 = $700 - $900
8 = Greater than $1,300

**How to pay for the baby:
1 = Savings account
2 = Insurance
3 = Medicare
4 = Medicaid
5 = Other

Table 2

Correlation of Economic Status and the Score Obtained on Prenatal Health Care Questionnaire

Measure	N	r	p
Income	29	.4622*	.006

*$p \leq .05$.

Additional Findings

Certain variables were correlated using the Pearson's r with the score obtained on the Prenatal Health Care Questionnaire. The variables subjected to this correlation included age, marital status, month of pregnancy, employment status, education level and whether this was a planned and wanted pregnancy. Of these variables, only age was significant with an r value of .3430 at the 0.05 level. These data can be found in Table 3. This finding suggests that as age increases, so does the knowledge level of primagravidas.

Table 3

Correlation of Age, Marital Status, Month of Pregnancy, Employed, Education, and Whether a Planned and Wanted Pregnancy with the Score Obtained on the Prenatal Health Care Questionnaire

Variable	N	r	p
Age	29	.3430*	.034
Marital status	29	.2425	.102
Month of pregnancy	29	.0698	.359
Employed	29	.0233	.452
Education	29	.0552	.388
Planned and wanted pregnancy	29	-.0415	.415

*$p < .05$.

There were 44.8% of the subjects that were high school graduates; however, some subjects still had a difficult time with some of the wording on the questionnaire. The researcher's presence during the time of testing helped clarify any misunderstandings and enhanced data collection.

It was noted that there was confusion relative to one question on the tool: Question number 17 concerning whether this was a planned and wanted pregnancy. Several subjects related that although the baby was not planned it was very much wanted.

There was a large number of participants who had no medical insurance. As a means of paying for the baby, 41.4% had other financial arrangements, such as monthly payments. Only 10.3% had a savings account.

Over half of the participants, 58.6%, utilized the birth control pill as a form of contraception prior to pregnancy. Only 17.2% of the sample did not utilize any form of contraception.

CHAPTER VII

Summary, Conclusions, Implications, and Recommendations

Summary

This research was a descriptive study designed to examine the relationship between prenatal knowledge and economic status of primagravidas. The researcher hypothesized that when pregnant women were surveyed and the results of knowledge and actual health care practices were correlated with economic level, there would be no significant difference.

A researcher-designed questionnaire was administered to 29 primagravidas between the ages of 18 to 32. There was a total of 29 participants. The participants consisted of 23 whites and 6 blacks.

The null hypothesis was tested by correlating the score obtained on the questionnaire with economic status. The Pearson's r correlation coefficient was used to analyze the data collected. Because the obtained r value was .4622 and significant at the .05 level, the researcher rejected the null hypothesis.

Conclusions and Implications

The researcher concluded from the data that a significant relationship does exist between knowledge of prenatal health care practices and economic status of primagravidas. Since there are no available research studies comparing the knowledge of prenatal health care practices and economic status of primagravidas, this finding cannot be supported from the literature. The variable of age was also significant: as one gets older, knowledge increases. It would be difficult to separate the variables of age and income. As one becomes older usually income increases as does experience. However, educational level was not significant, so it would appear that knowledge is not necessarily a function of education. This indicates that the Family Nurse Clinician (FNC) needs to educate all clients and make no assumptions regarding knowledge based on educational level. Each client needs individual assessment.

Since birth control pills was the method of choice for over half of the sample prior to pregnancy, the FNC needs to be aware of the implications of pill usage. One important aspect of birth control pills is the length of time using this form of contraceptive. The FNC needs to be aware of this

time factor on all clients utilizing the birth control pills.

Over half of the sample planned to pay for the baby through payments and other means. Most had no insurance or savings accounts. These facts seem to indicate the need for the FNC to take a thorough financial history on all clients and to become aware of the impact that health care costs relative to pregnancy can have on a couple's economic status.

The majority of the subjects were chosen from health department services because private physicians would not consent to allow clients to participate. This would imply that rapport with a variety of physicians should be established in order to promote research with their clients.

Recommendations

Based on the findings of this study, the researcher offers the following recommendations:

Research.

1. Replication of a similar study utilizing a larger sample.

2. Replication of a similar study in other geographic areas.

3. Conduction of a longitudinal study to begin with individuals during the 2nd and 3rd months

of pregnancy until the 8th month to see if knowledge increases.

4. Conduction of experimental research to assess the effect of education in knowledge of prenatal care.

5. Conduction of a study to determine knowledge level of child care postpartally.

6. Conduction of a study controlling for income.

7. Establishment of positive rapport with a variety of health care personnel to aid in research.

Nursing.

1. The FNC should take a careful financial history on all clients.

2. The FNC needs to be aware of the impact that the cost of pregnancy has on the family unit.

3. The FNC should have referral sources available for financial assistance to clients with low income.

4. The FNC should be aware of birth control pill use and be knowledgeable of the implications involved.

5. The FNC should treat clients as individuals when designing and conducting teaching.

APPENDICES

APPENDIX A

Agency's Memorandum of Agreement

Concerning Nursing Study

Title of Study: Knowledge About Prenatal Health Care Practices as Correlated to the Economic Status of Primagravidas

Name of Agency: _____

Study discussed with and explained to: _____
Name of Representative

Involvement in Study:

_____ Cooperation: Consent for subject to be used in study.

Communication Concerning Clients:

_____ at intervals (specify)

_____ as indicated

Comments:

_____ _____
Date Representative's Signature

_____
Investigator's Signature

APPENDIX B

Physician's Memorandum of Agreement

Concerning Nursing Study

Title of Study: Knowledge About Prenatal Health Care Practices as Correlated to the Economic Status of Primagravidas

Name of Physician: _____

Study discussed with and explained to: _____
Name of Physician

Involvement in Study:

_____ Cooperation: Consent for subject to be used in study.

Communication Concerning Clients:

_____ at intervals (specify)

_____ as indicated

Comments:

_____ _____
Date Physician's Signature

_____
Investigator's Signature

APPENDIX C

Information for Participants About Research Study

Title of Study:	Knowledge About Prenatal Health Care Practices as Correlated to the Economic Status of Primagravidas
Participants:	Individuals in Northeast Mississippi who are pregnant for the first time and are at least 18 years of age.
How Much Time is Needed:	A Prenatal Health Care Questionnaire will be administered. This should take approximately 20 minutes to answer. If you have any questions, be sure to ask the researcher.
Value of Study:	The findings of this study can be used by health care providers working with pregnant women to improve prenatal care.
Sharing of Information:	Your identity will be protected. No names will be used. The questionnaire will be assigned a number. Only the researcher will have access to these numbers.

APPENDIX D

Informed Consent Form for Participants in the Nursing Study to Determine the Correlation Between Knowledge About Prenatal Health Care and the Economic Status of Primagravidas

1. I, _____, willingly agree to be in the study of the below named researcher.
2. I have read the purpose and method of this study, and I understand the purposes the researcher wishes to achieve and the merit of the study.
3. The researcher has answered my questions to my satisfaction, and I understand that I can refuse to be in this study or withdraw at any time.
4. I have been informed by the researcher that my name will not be used in any manner.
5. To the best of my ability, I judge that I am in no danger (social, physical, mental, or emotional) by being in this study.

Thank you,

Melisa Lepard, R.N.

Signed: _____ Date: _____
Subject

Signed: _____ Date: _____
Researcher

APPENDIX E

Prenatal Health Care Questionnaire

Directions: Please answer all questions to the best of your ability by filling in the blank. If you have any questions ask the researcher for help.

1. Age: _____ 2. Race: _____

3. Marital Status: M ___ D ___ S ___ W ___ Sep ___

4. Religion: _____ 5. Highest grade completed ___

6. Number of times pregnant: _____

7. What month of pregnancy are you? _____

8. Are you presently employed? _____ as _____

9. Is your spouse employed? _____ as _____

10. Do you have transportation to and from the physician's office?

    1) Yes ____
    2) No ____

11. Estimate your monthly income:

    1) Less than $100 _____
    2) $100 - $300 _____
    3) $300 - $500 _____
    4) $500 - $700 _____
    5) $700 - $900 _____
    6) $900 - $1,100 _____
    7) $1,100 - $1,300 _____
    8) More than $1,300 _____

12. How do you plan to pay for this baby?

    1) Savings account _____
    2) Insurance (medical) ___
    3) Medicare ____
    4) Medicaid ____
    5) Other _____

13. What birth control method did you use before you became pregnant?

1) Condom (rubber) _____
2) Birth control pill _____
3) IUD _____
4) Other _____
5) None _____

14. Is this a planned and wanted pregnancy?

1) Yes _____
2) No _____

15. When did you realize you were pregnant?

1) 1 month _____
2) 2 months _____
3) 3 months _____
4) More than 3 months _____

16. When did you first seek medical care after you found out you were pregnant?

1) 1 month _____
2) 2 months _____
3) 3 months _____
4) More than 3 months _____

17. Do you have a regular doctor that will deliver this baby?

1) Yes _____
2) No _____

18. Do you have a yearly physical exam including a pap smear?

1) Yes _____
2) No _____

19. To whom do you seek medical advice?

1) Doctor _____
2) Nurse _____
3) Neighbor _____
4) Family _____
5) Other _____

20. To your knowledge, did your mother obtain prenatal care?

1) Yes ____
2) No ____
3) Don't know ____

21. Check if you have any of the following illnesses?

1) Sugar diabetes ____
2) High blood pressure ____
3) Heart disease ____
4) Lung disease ____
5) Kidney disease ____
6) Other _____
7) Not applicable _____

22. How often do you see a doctor for this illness?

1) Once a month ____
2) Once every 3 months ____
3) Twice a year ____
4) Yearly ____
5) More than yearly ____
6) Not applicable _____

23. Check the following foods you consider important?

1) Potato chips, coke, candy ____
2) Egg, orange, milk ____
3) Meat, vegetables ____
4) French fries, cake ____

24. How much weight should you gain during pregnancy?

1) 5 - 10 pounds ____
2) 10 - 20 pounds ____
3) 20 - 25 pounds ____
4) 25 - 30 pounds ____
5) More than 30 pounds ____

25. Check the following that are "warning signs" that might occur during pregnancy?

1) Severe headaches ____
2) Frequent urination ____
3) Vaginal bleeding ____
4) Fetal movement ____
5) Become tired easily ____
6) Nausea ____
7) Tender breasts ____
8) Blurred vision ____
9) Swelling of the face ____

26. Check the following you consider true signs of labor?

1) Irregular and mild contractions that occur for short periods of time _____
2) Presence of a bloody show _____
3) Regular contractions that begin to get harder and closer together _____
4) Contractions that are relieved by walking _____
5) Increase in fetal movement _____

27. Do you feel comfortable in calling your doctor if any complications occur?

1) Yes _____
2) No _____

28. Do you plan to have some type of anesthesia during labor and delivery?

1) Yes _____
2) No _____

29. Is your husband planning to be present during childbirth?

1) Yes _____
2) No _____
3) Not applicable _____

30. Check the following medications you are currently taking:

1) Aspirin _____
2) Tylenol _____
3) Laxative _____
4) Prenatal vitamins _____
5) Antacids _____
6) Cold medicine _____
7) Others (name) _____
_____

31. How many prenatal appointments have you missed during this pregnancy?

1) 0 - 1 _____
2) 1 - 2 _____
3) 2 - 3 _____
4) 3 - 4 _____
5) More than 4 _____

Comments:

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